

## U.S. GEOLOGICAL SURVEY-BRANCH OF ATLANTIC MARINE GEOLOGY

## CRUISE REPORT

## 1. SHIP NAME (Parent vessel)/SUBMERSIBLE/OWNER-OPERATOR:

**Mantova; Owned by Navigarda (Italian Passenger Ferry)**

## 2. CRUISE # AND LEG:

**GARDD-1-94**

## 3. PROJECT # AND NAME:

**9470-69634 Lake Garda, Italy**

## 4. FUNDING AGENCY:

**Consorzio per l'Innovazione dei sistemi Informativi  
geografici (CISIG)**

## 5. CONTRACT (If applicable):

## 6. AREA OF OPERATIONS:

**Lake Garda, northern Italy**

## 7. DATES AND PORTS OF CALL:

**JD <sup>Oct 19</sup>292-JD <sup>Oct 29</sup>302 (day trips out of Peschiera)**

## 8. CHIEF SCIENTIST(S):

**William C. Schwab**

## 9. SCIENTIFIC PARTY (Names,affiliations,cruise duties):

**T.F. O'Brien (USGS) - Electronic Technician  
W.C. Schwab (USGS) - Chief Scientist**

**W.W. Danforth (USGS) - Data Acquisition**  
**B. Irwin (USGS) - Navigator**  
**D.C. Twichell (USGS) - Data Processing**

**10. SHIP'S CAPTAIN (and affiliation):**

**Captains changed dally.**

**11. PURPOSE OF CRUISE (brief statement)**

**Create high-resolution sidescan-sonar image of Lake floor as part of cooperative with CISIG.**

**12. NAVIGATION TECHNIQUES:**

**Differential GPS.**

**13. SCIENTIFIC EQUIPMENT:**

**Datasonics SIS-1000 Sea-Floor Mapping System**

**14. TABULATED INFORMATION:**

**DAYS AT SEA: 11**

**CONTINUOUS DATA (in km): Approx 680 km**

**STATIONS OCCUPIED (stationary and underway): 0**

**SUBMERSIBLE DIVES (BY #): 0**

**STATION INFORMATION:**

**Station number:**

**Date of occupation:**

**Latitude/Longitude:**

**Water depth:**

**Sampling device (dive #):**

**Number and type of samples:**

**Remarks:**

**15. PAGE-SIZE TRACKCHART (including station & line #'s)**

**Producing this at a page-size scale would be worthless.**  
**These Imagery will be produced as USGS MF Map Series.**